

**Abstract**

A device for inspecting solder connections between a component and a substrate or between two components or substrates, wherein the component is disposed upon the surface of the substrate, the device including an image receiving unit. An image transmitting device, the image transmitting device including a first end and a second end, the first end coupled to the image receiving unit. A tip assembly removably coupled to the second end of the image transmitting device, the tip assembly further including a mirror and an image receiving aperture, the tip assembly configured to transmit an image of the solder connections received by the mirror, through the image transmitting device, to the image receiving unit, and an illumination device, the illumination device including a light source, at least one light transmitting device, and at least one light emitting aperture disposed adjacent the image receiving aperture, the light emitting aperture directed towards the solder connections to be inspected.